

Generic Groundwater Protection Plan

For Oil & Gas Producers

Emergency Response Information can be found on page 3

Introduction:

This Generic Groundwater Protection Plan (GPP) is an optional compliance tool, aimed at making the process of creating and implementing a GPP easier. In lieu of this document, operators may create multiple site specific GPPs, their own generic GPP per 401 KAR 5:037 Section 2 (8), or use a generic GPP compliant with 401 KAR 5:037 Section 2 (8) (b) prepared by another person or group.

Kentucky Administrative Regulation 401 KAR 5:037 establishes the requirement to develop and implement GPPs for activities that have the potential to pollute groundwater. The purpose of a GPP is to prevent groundwater pollution, ensuring protection for all current and future uses. A GPP consists of best management practices, inspections, and employee training designed to protect groundwater.

This Generic GPP applies to oil and gas wells, injection wells associated with oil and gas operations, associated pipelines, and tank batteries. This Generic GPP does not cover other downstream operations such as refineries, compressor stations, or gas processing plants.

Section A: General Information

See Attachment 3 for a complete and up to date list of leases covered by this GPP.

Name of Operator: _____

Office Address: _____

Person Developing GPP: _____

Affiliation: _____

Mailing Address: _____

Phone number: _____ Email address: _____

Person Responsible for Implementing GPP: _____

Affiliation: _____

Mailing Address: _____

Phone number: _____ Email address: _____

Brief Description of Operation or Facilities: _____

Section B: Activities that have the Potential to Pollute Groundwater

Place a check mark below by each activity conducted at the leases that has the potential to pollute groundwater. If additional activities are conducted that have the potential to pollute groundwater as listed in 401 KAR 5:037 Section 1 (1), please list them at the bottom.

___ Storing produced fluids, oil, brine, or other pollutants in tanks, drums, or separators (In containers 55 gallons or larger).

___ Storing drilling fluids, produced fluids, oil, or brine in pits or ponds.

___ Loading and unloading of pollutants into and out of tanker trucks.

___ Transmission of pollutants in pipelines, flowlines and gathering lines

___ Installation, construction, operation, or abandonment of wells, boreholes, or core holes.

___ Operation of oil wells.

___ Operation of gas wells.

___ Operation of injection wells.

___ Other: _____

___ Other: _____

___ Other: _____

Section C: Practices Selected to Prevent Groundwater Pollution

Place a checkmark by each practice below in order to prevent groundwater pollution from the above selected activities. By executing this Generic GPP the operator agrees to implement the following checked protective practices at their facility. Additional protective practices need to be added at the bottom to address each additional activity added in Section B.

☒ **Emergency Response Information:** The Spill Response Hotline (1-800-928-2380 or 502-564-2380) will be called for releases of petroleum, crude oil, brine, or diesel in quantities larger than the reportable quantity per KRS 224.1-400. Calling the Spill Response Hotline does not replace your responsibility to call 911 if human health or property are threatened. The Spill Response Hotline should be called even if the spill is contained inside of secondary containment.

-Add your own emergency numbers _____

-Add your own emergency numbers _____

-Add your own emergency numbers _____

-Add your own emergency numbers _____

☒ **Spill Response for spills below the reportable quantity:** Spills of petroleum, crude oil, brine, or diesel in quantities below the reportable quantity do not require The Spill Response Hotline to be called. For these spills, free product will be recovered and oil stained soil will be removed per KRS 224.1-400 and 401 KAR 100.300 and properly disposed.

☐ **Storing oil, brine, or produced fluids in tanks or drums:** All containers which are capable of containing 55 gallons or larger have a secondary containment device or structure. This includes tanks, drums, totes, oil water separators, heater treaters, or other separators. Secondary containment must be large enough to capture any potential spill while taking into account the potential for accumulated liquids, which decrease the capacity of the secondary containment structure. Inspections will be conducted to ensure that the secondary containment is sufficient, that there is no oil stained soil present, no fluids are present in the secondary containment, that drain valves in the secondary containment are maintained in the closed position when not in use, and that all containers show no signs of cracks or leaks. Impacted soils will be removed and properly disposed of. Large amounts of spilled oil will be contained and either be sent for recycling or pumped back into the tank battery.

Take note, a SPCC Plan may be required by the US EPA for certain tanks or facilities.

___ **Storing oil, brine, or drilling fluids in pits or ponds:** Pits and ponds are constructed to prevent groundwater pollution. Liners or impermeable soils will be used to prevent discharges to groundwater. No discharges from pits or ponds will occur unless a KPDES Permit is obtained. Pits and ponds will be inspected to maintain the above requirements.

___ **Loading and unloading of pollutants into and out of tanker trucks:** Employees will monitor all loading and unloading of oil, brine, or produced fluid. If any spills or overflows occur, the operator will promptly contain the spill, clean it up, and properly dispose of the waste materials. Spill containment and cleanup equipment shall be readily accessible.

___ **Transmission of pollutants in pipelines:** All flowlines, headers, collection lines, and all other lines will be installed and operated according to their regulatory requirements. Piping associated with tank batteries will be visually inspected for cracks or leaks. Impacted soil will be removed and properly disposed of and that section of line or pipe repaired.

___ **Installation, construction, or abandonment of oil wells, gas wells, brine injection wells, boreholes, or core holes:** Care needs to be taken not to cross contaminate aquifers as well as preventing surface water from entering the borehole or well. All oil, gas, and brine injection wells will be constructed according to their regulatory requirements. Oil, gas, and brine injection wells that are no longer in use will be properly abandoned per their permit or regulatory requirements.

Take note, a Class II Permit Application for Underground Injection Control (OG-14) is required to be submitted to the Division of Oil and Gas for brine disposal wells.

___ **Other BMP's selected:** _____

___ **Other BMP's selected:** _____

___ **Other BMP's selected:** _____

Section D: Implementation Schedule

This GPP is implemented effective immediately. All protective practices outlined in Section C are currently in place, unless specified below.

Practice in Section C (currently not implemented)	Date practice will be implemented
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

Section E: Employee Training:

Employees working at these facilities are required to be trained on the contents of this GPP annually and upon hire. Topics to be covered include how to identify and contain leaks and spills, to properly contain and recover small spills and how contact the emergency response team in event of a large spill, and to contain and remediate the release. The employees should be able to find the emergency contact numbers in the GPP, be trained to conduct inspections using the inspection checklist, and be trained on the other contents of the GPP.

Each time GPP training is conducted a training roster will be completed and retained for that event (see Attachment 2).

Section F: Inspection Schedule

Inspections of the tank batteries, piping associated with tank batteries, wells, pits, and ponds will be conducted once a month. Flow lines, gathering lines, and other lines will be inspected if suspected of improper functioning or leaks. Each time an inspection is conducted, an inspection form will be completed and retained (see Attachment 1).

Section G: Certification Statement

Please have the person responsible for implementing the GPP (as identified in Section A of this Plan) or an authorized representative as defined by 401 KAR 5:002 sign and date the following certification statement. Additionally, the GPP needs to be reviewed and

recertified by the person implementing the GPP every three years. The GPP is not required to be submitted to the Cabinet every three years.

I, _____, certify that this Groundwater Protection Plan complies with the requirements of 401 KAR 5:037. I have read the terms of the plan and will implement its provisions.

Signature: _____ Date: _____

Section H: Record Retention Requirement

All compliance records, such as completed training rosters and completed inspection checklists will be retained and made available upon request for the Energy and Environment Cabinet to review for a period of up to six years.

If the lease or operation is transferred or sold, a copy of the GPP, completed training rosters, and completed inspection checklists will be transferred to the new owner.

Describe below how members of the public can review your GPP and associated compliance records (such as completed training and inspection forms). Include information such as: the location where the GPP will be kept, any relevant contact information to review the GPP, if an appointment is necessary, and the hours the GPP will be accessible. Keep in mind the GPP and the associated compliance records are required to be available at or near each lease if manned 8 hours a day, or the nearest office that is manned 8 hours a day rather than one centralized location.

Attachment 1: Inspection Checklist

Lease Name: _____

Name of Inspector: _____ Date of Inspection: _____

Inspector Signature: _____ Date Signed: _____

Item	Well ID or Battery ID	Comments – describe Corrective Action Taken, or note None Needed
All tanks are free of cracks or leaks.		
All containers 55 gallons or larger are inside secondary containment.		
Secondary containment device or berm hasn't been cracked or degraded.		
Inside of the secondary containment device or berm is free from oil, brine, and impacted soil.		
Drain valves associated with secondary containment device or berm are in the closed position.		
Separators are properly operated and maintained and free of cracks or leaks.		
No evidence of cracks or leaks in lines and pipes are present.		
Pits and ponds are not leaking or discharging.		
Wellheads are properly operated and maintained and free of cracks and leaks.		
Spill response equipment present and stocked.		

Attachment 2: Employee Training Roster

*A different training roster may be attached as long as it provides the same information.

Date of Training: _____ Annual Refresher or New Hire Training: _____

Topics Covered in Training:

- How to respond to large and small spills.
- Emergency response and contact numbers.
- How to conduct inspections and use inspection form.
- Other content in the Groundwater Protection Plan.

Employees in Attendance:

[illegible]

Attachment 3: Leases Covered by this GPP

*A different table may be attached as long as it provides the same information.

[illegible]